REMARKS

This Response is submitted in reply to the Final Office Action dated December 12, 2007, in which the Examiner rejected claims 1-13 under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 3,875,481 to Miller et al., in view of WIPO Publication WO 02/37660 A1 ("Benslimane") and U.S. Patent No. 4,549,093 to Severwright.

Applicants respectfully traverse the rejection below. Claims 1-13 are currently pending. Claims 1 and 11, directed to a tactile sensor element and array, respectively, are independent claims.

Regarding the rejection of claims 1-13 under 35 U.S.C. § 103(a) as unpatentable over Miller in view of Benslimane and Severwright, a rejection under 35 U.S.C. § 103(a) is improper unless the Examiner establishes a *prima facie* case of obviousness. A *prima facie* case of obviousness is not established where the reference teachings, alone or in combination, do not teach or suggest each and every claim recitation.

Applicants' claim 1 recites, in part, a tactile sensor element comprising an elastomeric body arranged between first and second pressure transfer layers, the body having a first surface and a second surface opposed to each other, the first and second surfaces having corrugations, and a first electrode arranged on the first surface and a second electrode arranged on the second surface, wherein at least one pressure transfer layer has at least one portion of increased thickness. Applicants' claim 11 is directed to a tactile sensor array comprising, in part, a plurality of sensor elements, and includes similar recitations to those discussed in connection with claim 1.

Miller does not teach or suggest each and every recitation of claim 1 or 11. For example, Miller does not teach or suggest an elastomeric body having opposed first and second surfaces with corrugations. Instead, Miller teaches an arrangement in which dielectric, elastomeric, compliant layers 14 and 15 *each* have a *single* ribbed surface, the ribbed surfaces sandwiching a centrally-located conductive layer 13. The Examiner also notes in the Office Action that Miller

"does not disclose that the first and second surfaces of the elastomeric body include corrugations". (Office Action, pg. 2).

Additionally, Miller does not teach or suggest first and second electrodes arranged on the respective first and second surfaces. The Examiner erroneously states in the Office Action that layers 11 and 12 are electrode or conductive layers and are each arranged on the first and second surfaces of the body 13. (Office Action, pg. 4). However, Miller does not disclose, teach or suggest that layers 11 and 12 are arranged on the first and second surfaces of body 13. Instead, Miller teaches that the two dielectric layers 14 and 15 are bonded to the faces of the conductive layer 13. (Miller, col. 2, lines 49-54).

Miller also does not teach or suggest that an elastomeric body with electrodes on opposed first and second surfaces is located between first and second pressure transfer layers, as recited by Applicants' claims 1 and 11. For instance, Miller's dielectric, elastomeric, compliant layer 14 is sandwiched between conductive layers 11 and 13. Similarly, Miller's dielectric, elastomeric, compliant layer 15 is sandwiched between conductive layers 12 and 13. Miller does not teach or suggest *any pressure transfer layer* above the conductive layer 11 or below the conductive layer 12. Even if layers 11 and 12 of Miller are incorrectly characterized as being electrodes on opposed first and second surfaces of body 13, as stated by the Examiner on page 4 of the Office Action, Miller still fails to teach or suggest that the mischaracterized arrangement is located between first and second pressure transfer layers, as recited in the present invention.

Furthermore, Miller does not teach or suggest that at least one pressure transfer layer has at least *one portion of increased thickness*, as recited by Applicants' claims 1 and 11. Even if Miller's conductive layers 11 or 12 were considered to be both electrodes *and* pressure transfer layers, Miller does not teach or suggest that either one of the layers 11 or 12 has a portion of increased thickness. Instead, Miller teaches that its layers 11 and 12 "may have a thickness of, for example, 0.070 inch[es] made according to the procedure and recipe given". (Miller, col. 2, lines 46-49). This does not teach a pressure transfer layer with at least one portion of increased thickness, as stated by the Examiner in the Office Action. (Office Action, pg. 4). Instead, if anything, it teaches that Miller's

layers 11 and 12 have a constant thickness that is determined by the procedure disclosed.

Benslimane does not add to the teachings of Miller, at least in that Benslimane also does not teach or suggest first and second pressure transfer layers arranged around its elastomeric body 2. Since Benslimane does not teach or suggest pressure transfer layers, it certainly does not teach or suggest a pressure transfer layer having at least one portion of increased thickness.

Severwright does not add to the teachings of Miller and Benslimane, at least in that Severwright also does not teach or suggest an elastomeric body arranged between first and second pressure transfer layers. Instead, Severwright teaches an array of row conductors 1 and column conductors 3, separated by an insulating material 4, and disposed on an alumina substrate 2. (Severwright, col. 2, lines 58-64). Severwright further teaches that the conductors and the insulation can be printed onto the substrate using a paste of powdered metal in powdered glass for the conductors and a paste of powdered glass for the insulation. (Severwright, col. 4, lines 4-8). Therefore, Severwright does not teach or suggest an elastomeric body or pressure transfer layers. Since Severwright does not teach of suggest pressure transfer layers, it certainly does not teach or suggest a pressure transfer layer having at least one portion of increased thickness. Additionally, Severwright is directed to a *conductive* pressure sensor, sensing pressure based on *electrical contact* between conductors (see, e.g., Severwright, col. 3, lines 39-48). Thus, Severwright is non-analogous to the present application, and not properly cited in a § 103 rejection. (See MPEP 2141.01(a).)

The combination of Miller, Benslimane and Severwright also fails to teach or suggest each and every recitation of Applicants' claims 1 and 11, at least in that the combination fails to teach an elastomeric body, as recited in claim 1 or 11, located between first and second pressure transfer layers. Additionally, the combination fails to teach or suggest a pressure transfer layer having at least one portion of increased thickness.

Therefore, neither Miller nor Benslimane nor Severwright, nor any combination thereof, teaches or suggests each and every recitation of Applicants' claims 1 and 11. Thus, a *prima facie* case of obviousness has not been established for claims 1 and 11. Additionally, as noted above, at least Severwright is non-

analogous art, and is not properly used in support of a claim rejection under § 103. Therefore, the rejection of claims 1 and 11 under 35 U.S.C. § 103(a) as unpatentable over Miller in view of Benslimane and Severwright is improper and should be withdrawn.

Claims 2-10, 12 and 13 depend, directly or indirectly, from independent claim 1 or independent claim 11, and include additional recitations thereto. Accordingly, Applicants respectfully submit that the rejection of dependent claims 2-10, 12 and 13 under 35 U.S.C. § 103(a) is improper for at least the reasons stated above in connection with independent claims 1 and 11, and should be withdrawn.

As Applicants have traversed each and every claim rejection raised by the Examiner, it is hereby respectfully requested that the rejection of claims 1-13 be withdrawn, and claims 1-13 be passed to issue.

Applicants believe no fees are due in connection with this Response. If any fees are deemed necessary, authorization is granted to charge any such fees to Deposit Account No. 13-0235.

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